

#### MAYOR OF LONDON

## Built Environment Professional Education Project

# Report of Progress



'Inspired inclusive design at the London 2012 Olympic and Paralympic Games has left a lasting legacy'



Inspired inclusive design that achieves a truly accessible and inclusive environment has real value to society.

Every built environment professional can help make an inclusive built environment a reality.

Greater awareness and understanding, increased knowledge and skills, and a commitment to deliver inclusive projects, will ultimately lead to better access and inclusion for everyone in all our buildings and public spaces.

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### Foreword by the Minister for Disabled People

Inclusive design is good design. It opens up buildings, places and spaces to everyone, enabling all of us to live, work and play together.

But for too long inclusive design has been viewed as a "nice to do" or something that needs to be considered only in terms of the minimum standard outlined in regulations. It seems incredible that newly qualified built environment professionals could start their careers having received only



the most cursory of introductions to such a vital element of design, and yet that has often been the case.

That's why I have been delighted to sponsor the Built Environment Professional Education project. It has raised the profile of inclusive design education for our future built environment professionals and has led to tangible steps forward amongst the professional institutions.

The spirit of collaboration and commitment to change has been striking. Government departments and the Mayor of London's team have worked together to help inspire change and the project has now gained the support of a wide range of professional institutions.

Lasting change will take time, but this report shows what great progress has been made over the past two years. We have moved closer to our long-term goal of embedding inclusive design into built environment education. But now is the right time to hand the project over to the built environment sector to take forward and bring about the step change in culture that is needed.

I want the momentum of the project to be maintained, so I look forward to continuing to work with the sector and celebrating further progress in the years to come.

Jushi

**Justin Tomlinson** Minister for Disabled People

### Foreword by the Mayor of London

Inclusive design makes practical sense.

An environment that is accessible to all is fitting for a city as diverse as London. It allows disabled people, older people and parents with pushchairs to get around easily and access the many social, cultural, and economic opportunities that London has to offer.

I am extremely pleased to support the Built



Environment Professional Education Project (BEPE). The BEPE project has used the legacy of the London 2012 Games and put inclusive design at the heart of planning, design, engineering and architecture.

Embedding inclusive design makes business sense.

By having inclusive design as part of university courses and professional training programmes, it saves us the bigger costs of making retrospective changes. It costs more to correct inaccessible design once a scheme is built than to address it effectively from the outset. By ensuring inclusive design is embedded as part of planning, design and other built environment courses, BEPE is changing the very nature of the way professionals are educated and trained. The legacy of this will benefit generations to come.

There have been significant achievements already. For example, the British Institute of Facilities Management has published standards for access and inclusion as part of their Professional Standards Framework. But I do not take the challenge lightly. Making changes of this magnitude will be a sea-change and I hope, alongside government, as we handover this project to industry, the momentum is maintained.

I very much look forward to seeing the future progress of this fantastic and hugely beneficial project.

Illuce

**Boris Johnson** Mayor of London

### **Executive Summary**

The Built Environment Professional Education Project (BEPE) aims to build on the legacy of the London 2012 Olympic and Paralympic Games by helping to generate a shift change in how inclusive design skills are taught in the UK. The aim is that all built environment professionals will receive mandatory, quality teaching about inclusive design so that they can help create inclusive buildings, places and spaces for future generations.

#### Lord Coe, the Government's Olympic and Paralympic Legacy Ambassador 2012 - 2015

"The focus of this project on training and education will mean a lasting Paralympic legacy which will inspire future generations of built environment professionals to achieve truly accessible and inclusive environments for everyone."

After over two years of support from government and the Greater London Authority, the Built Environment Professional Education project, or BEPE as it became known, has the active support of eighteen of the biggest and most respected institutions and organisations in the sector, has inspired changes to professional standards and competencies, and raised the profile of inclusive design amongst professional educators and students.

The project has not been without challenges, foremost of which has been the varying complexity and diversity of the organisations involved. Changing educational processes is a long-term goal requiring attitude and cultural changes in educational institutions, coupled with changes to professional standards.

BEPE is now nearing the end of its start-up phase and is sufficiently mature to be handed

over to the built environment sector to manage. This report captures the progress and achievements of the project to date, and looks ahead to what it can achieve in its next phase.



Crowds in front of the Olympic Stadium July 2012

### **1. Introduction** 'The most accessible Games ever'

**1.1** The London 2012 Olympic and Paralympic Games were hailed as "the most accessible Games ever". Those involved in preparations went to great lengths to ensure the experience of attending the Games, whether as a spectator, member of the workforce or athlete, was as inclusive and accessible as possible. The level of success achieved was not, however, a happy accident or an inevitable consequence of the sizeable budget and scale of ambition. It took dedicated skills and capabilities, employed over the many years leading up to the Games. Inclusive design was deliberately embedded into the design and build process, championed at the highest levels and constantly checked to ensure the right results were achieved.

#### **Baroness Tanni Grey-Thompson**

"The London 2012 Games were the most accessible in history."

#### A Paralympic legacy

1.2 In December 2012 the Paralympic Legacy Advisory Group was set up to advise and scrutinise legacy plans after London 2012. The group was made up of representatives from, amongst others, leading disability charities, Disabled People's User-Led Organisations (DPULOs), Paralympians and business. It identified that the success of the Games and the almost unique level of inclusivity achieved in the Olympic Park and venues provided an opportunity to stimulate an increase in inclusive design in the built environment in the UK.

### Transformation of Queen Elizabeth Olympic Park into a new inclusive London neighbourhood

The Mayor of London, through the London Legacy Development Corporation (LLDC) has embraced the spirit of the Games and is now transforming Queen Elizabeth Olympic Park and it's surroundings into one of the most accessible parks and inclusive neighbourhoods in the UK - a new part of London that can be enjoyed by everyone. The inclusive design principles, processes and procedures being used by the LLDC in the new neighbourhoods being procured, designed and built in and around the park illustrate how an inclusive environment can be achieved when designed in from the outset.

**1.3** With Queen Elizabeth Olympic Park (QEOP) and its surroundings setting the benchmark for achieving an inclusive environment, the Paralympic Legacy Advisory Group argued that this level of inclusivity could and should become business as usual in all future construction projects - a fitting and lasting Paralympic legacy.<sup>1</sup>

#### Setting the vision

- **1.4** The Paralympic Legacy Advisory Group recommended that consideration should be given to a project to improve inclusive design knowledge, skills and capabilities in the built environment sector. In particular, they recommended that all new entrants to built environment professions should receive inclusive design as a mandatory part of their professional training, and should have to demonstrate competency in this area in order to qualify in their chosen profession.
- **1.5** There has, in the last 20 years, been a rise in the number of specialist access experts working hard to support businesses to improve physical access to their buildings. However, not all projects employ specialists and there are unfortunately, still examples of new and refurbished buildings where attention to the details of good accessibility are often overlooked.
- 1.6 The Advisory Group recognised that not every built environment professional needed to become an expert, but an increase in knowledge, skills and understanding in inclusive design<sup>2</sup> principles and processes would assist in raising the level of inclusivity achieved.
- **1.7** A change in the education of new built environment professionals had the potential to change mindsets and build the required capabilities to drive a long-term behavioural shift. Despite some barriers around the complexity of the built environment sector, it was deemed a feasible route to pursue.

<sup>&</sup>lt;sup>1</sup> Queen Elizabeth Olympic Park film

<sup>&</sup>lt;sup>2</sup> The principles of inclusive design They Include You CABE 2006

### What is Inclusive Design?

When buildings, places and spaces are inclusively designed, built and managed it helps all of us to live, work and play independently, be involved in our community and reach our full potential.

The government's Planning Practice Guidance defines an inclusive environment as:

'One that can be accessed and used by everyone. It recognises and accommodates differences in the way people use the built environment.'

Design Council CABE:

Inclusive environments are:

- welcoming to everyone
- responsive to people's needs
- intuitive to use
- flexible
- offer choice when a single design solution cannot meet all user needs
- convenient so they can be used without undue effort or special separation and so that they maximise independence



Graphic from 'Accessible London' Supplementary Planning Guidance Greater London Authority © Gethyn Davies

### 2. The project to date Gathering the evidence

- **2.1** The consultancy firm McKinsey carried out pro bono research into the topic to test the need for intervention and to suggest the best approach.
- 2.2 Their work showed that, despite some good practice, the majority of built environment students did not receive adequate training in inclusive design, even fewer were assessed on their skills in this area and learning was inconsistent across the different built environment disciplines. In contrast, for example, sustainability received approximately ten times as much teaching time. McKinsey concluded that universities and higher education institutions should be encouraged to improve their teaching of the subject.
- 2.3 It was decided that the best way to stimulate change in the education sector was for the professional institutions to make explicit reference to inclusive design knowledge and skills in the criteria used to accredit higher education programmes and in their assessments of professional competence when considering applications for chartered membership a system change rather than just a few more lectures on the topic.
- 2.4 It was, however, recognised that this type of system change would take time, that in such a diverse industry change would move at different speeds for different built environment professions and that any project to initiate change would take at least five years before starting to take effect.

**Professor Deborah Peel** (Dundee University) in her article 'Bridging Educational Divides? An Inclusive Approach to Teaching First Year Planners' describes how first year undergraduate planning students involved a local charity working with people with learning disabilities in their imaginary project to access regeneration funding from the Heritage Lottery Fund. Planning students became alert to the consequences of a disabling and non-inclusive environment and were able to suggest ways to overcome this.

#### Funding and cross-government support

**2.5** The evidence for the project was reviewed by a sub-group of the Paralympic Legacy Advisory Group and a case for funding was subsequently endorsed by the Olympic and Paralympic Legacy Cabinet Committee.

- 2.6 The project brought together government departments and the Greater London Authority to fund and manage the work. In addition to a funding contribution from the Department for Work and Pensions (through the Office for Disability Issues) and the Greater London Authority, the Department for Business, Innovation and Skills part funded the project in its first year and the Department for Communities and Local Government in its second year.
- 2.7 The funding enabled the project to employ a project lead, seconded from the Greater London Authority, with the relevant expertise in inclusive design and experience from advising on preparations for the London 2012 Games. The Olympic and Paralympic Legacy Unit (based in the Cabinet Office and later the Department for Culture, Media and Sport) provided in-kind support throughout the project in the form of a part-time official to assist the BEPE Project Lead.
- **2.8** The project was formally launched at a reception held in City Hall in December 2013.<sup>3</sup>

#### Sir Edward Lister, Deputy Mayor of London for Planning

"The 2012 Olympic and Paralympic Games were widely recognised as the most inclusive ever and one way we achieved that was through the design of the venues and the Park. We set ourselves the highest standards of inclusive design and now we are building on that success to ensure that accessibility is at the heart of education for all built environment professionals."

#### **Project governance**

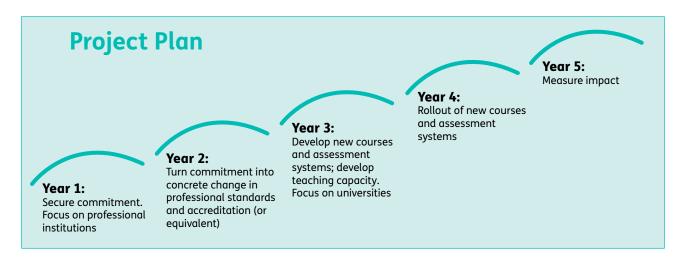
2.9 To steer and scrutinise progress the BEPE Project Board was established and Paul Morrell (the Government's Chief Construction Adviser from November 2009 to November 2012) was asked to be the chair. A number of senior representatives from professional institutions and other built environment organisations were invited to be members of the Board (see Annexe One). A small project team of officials from government and the Greater London Authority met regularly to guide progress at a more detailed level. **2.10** The vision set for the BEPE project was that:

'Every newly qualified built environment professional will have the knowledge, skills and attitude to deliver accessible and inclusive buildings, places and spaces.'

**2.11** This would be achieved by:

'Embedding inclusive design as a core part of the required curriculum in the education of built environment professionals, with student assessments and Assessments of Professional Competence that reflect this.'

**2.12** The project plan was outlined in the scoping work McKinsey carried out at the start of the process:



### Raising the profile of inclusive design

2.13 The initial task for the BEPE Project Lead was to gain the support of the professional institutions. As they were received, supportive statements were uploaded to the GOV.UK website<sup>4</sup> (see Annexe Two). The project lead engaged with each institution separately, encouraging them to consider their current work and approach to inclusive design, and their aspirations for future years. These emerging plans, or roadmaps, formed the basis for tracking progress in the professional institutions. Meetings between the chair of the BEPE Board and presidents and chief executives of the key professional institutions helped to provide high level buy in to the aims of the project – 'in principle' support was forthcoming in all cases.

<sup>&</sup>lt;sup>4</sup> What supporters say about the BEPE project

- **2.14** As the project progressed the focus expanded to the education sector, with presentations given to the key higher education built environment educator forums, including SCHOSA, AAE, CHOPS, CHOBE and ACED (see Annexe Three for glossary of acronyms).
- **2.15** A sub group was established in 2014 to consider how and whether the development of educational resources would help to build capacity in the higher education sector. A number of key experts in built environment education were invited to a workshop hosted by McKinsey in November 2014 which stimulated debate on:
  - the barriers to delivering effective inclusive design education
  - what is effective inclusive design education
  - what learning materials / resources / initiatives are needed to achieve systematic change

**Professor Marcus Omerod,** Salford University, set his students studying for a Masters in Accessibility and Inclusive Design, the following assignment:

Through the use of case studies (involving built examples and analysis of user interaction), examine one aspect of the built and human environment (for example building entrances, stairs, pedestrian crossings) in terms of an inclusive approach to design, and:

- evaluate different options taken by designers in real life situations
- record and analyse the ways in which users interact with the selected aspect
- provide relevant theory to support your work such as models of disability, design theory, user observation, user interaction analysis
- identify better practice solutions and justify the reasons for these solutions
- **2.16** The BEPE Project Lead contributed to various journal articles, including the RICS Building Surveyor and Building Control Journals, the RTPI's The Planner magazine, the AAE Journal Charrette,<sup>5</sup> and the Centre for Accessible Environments Journal Access by Design. A webinar for the Landscape Institute<sup>6</sup> helped to highlight the project to landscape architects, using examples from Queen Elizabeth Olympic Park to illustrate best practice.

<sup>&</sup>lt;sup>5</sup> Charrette Journal Volume 2 Issue 1

<sup>&</sup>lt;sup>6</sup> Landscape Institute webinar Oct 29th 2015

- **2.17** The project lead and BEPE Project Board members spoke at numerous conferences, seminars and events promoting and informing the sector about the BEPE project, its aims and objectives, including:
  - June 2014 BIFM Facilities Show
  - July 2014 SCHOSA conference
  - September 2014 AAE conference
  - December 2014 CIAT Accreditors Leaders Meeting
  - December 2014 CHOPS Meeting
  - January 2015 RTPI General Assembly Meeting
  - September 2015 RCA Include Conference<sup>7</sup>
  - September 2015 CHOBE iBEE conference<sup>8</sup>
  - November 2015 ACED conference
  - November 2015 Architecture Boston Expo (ABX)<sup>9</sup>

(See Annexe Three for the Glossary of Acronyms)

- **2.18** Over 150 stakeholders received regular updates of progress with the project.<sup>10</sup> Updates were issued every two or three months and helped to explain the purpose of the project, the Board membership, key moments of progress by the professional institutions and the higher education sector, links to articles, webinars, and other relevant initiatives.
- 2.19 Progress was celebrated in December 2014<sup>11</sup> and in December 2015<sup>12</sup> by receptions hosted by the Mayor of London in London's City Hall, at which the Minister for Disabled People pledged his on-going support for the project. A short film made on Queen Elizabeth Olympic Park was shown at the 2014 reception to illustrate the benefit of an inclusive environment and stress the importance of good education and training for built environment professionals.<sup>13</sup>



Gentle slopes throughout Queen Elizabeth Olympic Park provide easy access for everyone

- <sup>8</sup> CHOBE iBEE conference
- <sup>9</sup> AB Expo 2015 conference session B41
- <sup>10</sup> BEPE Updates
- <sup>11</sup> BEPE First Anniversary
- <sup>12</sup> BEPE Second Anniversary
- <sup>13</sup> Queen Elizabeth Olympic Park film

<sup>&</sup>lt;sup>7</sup> RCA Include 2015

### 3. Lessons Learned What went well

#### In principle support

**3.1** As shown by the press release on International Day of Disabled People in 2013, the project had in principle support from six of the top built environment professional institutions from the start, representing architects, town planners, surveyors, engineers, construction managers and facilities managers. They agreed to seek ways to embed inclusive design into education and training. By the time of the project's second anniversary 18 organisations had provided in principle support.

#### Minister for Disabled People in 2013:

"I want to see the architects and planners of the future be able to put accessibility at the heart of their designs – and I'll be working with professional bodies and academics to make that happen."

#### In principle support

**3.2** The 'in principle' support quickly changed into actual action for two of the key professional institutions – the Chartered Institute for Architectural Technologists (CIAT) and the British Institute of Facilities Management (BIFM). Both these initiatives were a great step forward in realising the BEPE objective, and should help over time to ensure that new entrants to the facilities management and architectural technology professions receive clear and consistent learning on inclusive design.

#### **Review of Subject Benchmark Statements**

- **3.3** CIAT's progress was helped in 2014 by the timing of the review of the Subject Benchmark Statement for Architectural Technology by the Quality Assurance Agency (QAA). The QAA is the independent body that oversees standards in higher education in the UK and is responsible for issuing Subject Benchmark Statements (SBSs). SBSs form part of the UK Quality Code for Higher Education and set out what graduates in a particular subject might reasonably be expected to know, do and understand at the end of their programme of study. They describe what can be expected of a graduate in terms of the academic standards skills and abilities needed to develop understanding or competence in a subject.
- **3.4** The QAA is, at the time of writing, reviewing the SBSs for Town and Country Planning, Landscape Architecture, and Construction, Property and Surveying. The case has been made for inclusive design skills to be included in all three benchmark statements – which should further assist the BEPE objective.

#### Engagement with a wide range of built environment organisations

**3.5** The Construction Industry Council (CIC) assisted in helping to reach out to a large number of organisations by including BEPE on the agendas of three of their working groups – their Diversity Panel, Education for Built Environment Panel (E4BE) and their Health and Safety Panel. As a result inclusive design is included in the E4BE Action Plan on skills. The wide range of CIC membership meant that the BEPE message was reaching far and wide.

#### **Inspiring Students and Educators**

**3.6** As well as working with the professional institutions to make inclusive design a requirement of accredited education programmes, the BEPE project also wanted to inspire students and educators to start teaching and learning about inclusive design in advance of any actual requirement by the professional institutions. Presentations were given to the key educator forums including SCHOSA, CHOPS, CHOBE and ACED (see Annexe Three for Glossary of Acronyms). This helped to raise awareness of the BEPE project with educators, and highlighted the need to share good practice in teaching inclusive design.

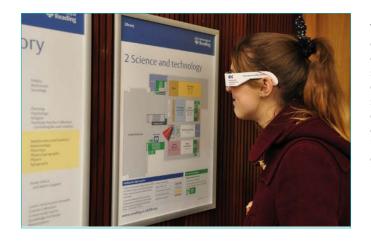
Some educators are already addressing inclusive design – for example Victoria Farrow set her undergraduate architecture students at Nottingham Trent University an architectural challenge to design the following live work space:

- a house for a visually impaired furniture designer
- a house for a bipolar painter and portrait artist
- a house for a somnambulist sculptor
- a house for a deaf performance artist
- a house for a taxidermist
- a house for a disabled jewellery maker
- **3.7** CHOBE helped to promote BEPE at their iBEE (Innovation in Built Environment Education) conference in Bath University in September 2015, reaching out to a large number of heads of built environment schools. The BEPE Project Lead was invited to present the BEPE project alongside the University of Reading who had, as a result of the BEPE project, initiated an inspiring project called Breaking down Barriers.<sup>14</sup> This cross-disciplinary project took up the challenge of embedding the theme of inclusive design into the curriculum at undergraduate and postgraduate level within built environment programmes. Inclusive design is now being taught on the University of Reading undergraduate typography course, to undergraduate surveying and construction management students and is being embedded into the new architecture course which begins in the autumn of 2016.<sup>15</sup>

<sup>&</sup>lt;sup>14</sup> Reading University Breaking down Barriers

<sup>&</sup>lt;sup>15</sup> University of Reading School of Architecture

CHOBE have approved a joint abstract on BEPE and the University of Reading's Breaking down Barriers project, to be published in the special edition of their journal in 2017.



The Design Thinking module for undergraduate graphic communication students at the University of Reading is addressing visual inclusion through a series of experiential learning workshops. Focussing on increasing student awareness of visual acuity, the students were encouraged to define the meaning of inclusive design, to consider who benefits from an inclusive approach to design, to reflect on the importance of such an approach, and to begin to consider what represents good practice.

#### **Student Design Award**

**3.8** Another initiative which is helping to stimulate student interest in inclusive design is the Royal Society of Arts Inclusive Cities<sup>16</sup> Student Design Award. The aim was to inspire innovative and creative inclusive design projects from undergraduate and postgraduate built environment students. Students were encouraged to submit a design, a concept, a plan or a strategy for a place or space in which to work, live, shop, do business, or play - a building, place, or space that is easily and comfortably accessed and used by everyone. The RSA's brief sets out the background saying that:

'inclusive design goes well beyond simply satisfying the requirements of government legislation or regulations - it's about understanding people - their needs, their concerns, and what they really want from a building -

and engaging the more social aspects of the built environment that others overlook. Whether you call it inclusive design, universal design or design for all – it's about socially sustainable design that puts people at the heart of the design process, which provides choice and flexibility, acknowledges diversity and difference and does not preclude anyone.'



#### NCLUSIVE CITIES

**3.9** The awards will be given in June 2016 and the prize winner will be offered a two month secondment with the Inclusive Design team at BuroHappold Engineering.

<sup>16</sup> RSA Inclusive Cities Student Design Awards 2016

#### **Educational Resources**

- **3.10** Support was also given, in terms of attendance at steering group meetings, to a project led by Design Council CABE, who, following a grant from the Department for Communities and Local Government, created the Inclusive Design Hub<sup>17</sup> a central place for information on how to achieve an inclusive environment. Launched in July 2014, the Hub brings together a large collection of information, from best practice to guidance and legislation, and statistics that support the business case.
- **3.11** The next phase of CABE's work is to produce an online training course<sup>18</sup>, with content designed to suit all built environment disciplines and to be useable by educators and students as well as practitioners. The proposed scope of training includes:
  - The development of high quality, cross-disciplinary CPD (Continuous Professional Development) training on delivering inclusive environments recognised by the professional institutions
  - content to feature an introduction to the planning, design, construction and management of inclusive environments
  - accessible content to be relevant to all built environment professionals including planners, designers, engineers and facilities managers
  - showcase emerging trends in the field and demonstrate inclusive best practice
- **3.12** Once this training is launched it can be used as an introduction to inclusive design issues and by each professional institution to develop further profession specific training for their members a 'T' shape to the learning where the horizontal is the Design Council CABE Inclusive Environments training course giving a generic strategic overview, and the vertical is the more detailed profession specific learning.

### Challenges

#### Acceptance of the need to change

**3.13** One of the main challenges the project faced was convincing people that there were issues with the current situation and there was a need for change. Many people held the view that inclusive design was already something taught to an appropriate level and people had a good (in some cases intuitive) understanding of it. It was also often seen as a specialist area of learning, not necessarily relevant or appropriate for all built environment professionals - poor take up of CPD training courses on access and inclusive design was often quoted.

<sup>&</sup>lt;sup>17</sup> CABE Inclusive Environments Hub

<sup>&</sup>lt;sup>18</sup> CABE Inclusive Environments Training

#### **Stephen Hawking London 2012 Paralympic Games Opening Ceremony:** "The enemy of knowledge is not ignorance but the illusion of knowledge"

**3.14** Part of the reason for raising the profile of the BEPE project through media and presentations was to demonstrate the limitations of the current situation and the work that still needed to be done. Campaigns by organisations of disabled people, such as Muscular Dystrophy Trailblazers, Level Playing Field, Leonard Cheshire and SCOPE, demonstrate that disabled people are still facing barriers in the built environment which can prevent them from fully participating in everyday life.

#### Complexity of the landscape

**3.15** For some professional institutions the complexity of their governance structures and decision-making processes (in some cases involving international bodies) made any changes to professional criteria a long-term and challenging goal. In these cases the project looked to work with institutions to find other areas where changes could be made and to encourage change over the long term.

The RICS membership covers 38 countries worldwide with 95 overseas accredited schools, so any changes to professional standards have to reflect this global status.

#### Economic challenges in the sector

**3.16** The general economic downturn in the sector meant that institutions and educational facilities were in some instances reducing their staff and resources, and merging departments and programmes, rather than looking for new areas of work. Again, the project encouraged activities that could be accommodated within existing resource constraints.

#### Lack of consistent and agreed content

**3.17** Even with an acceptance of the need for change, there was a consistent call for examples of good practice both in demonstrating accessible buildings and in teaching projects. More materials and content to teach inclusive design effectively would help. There are a number of CPD courses available for qualified practitioners – many access consultants run short courses on inclusive design and access auditing for example. However, there are currently no standard materials that can be used for undergraduate students, so it falls to individual educators to identify the core learning requirements and the more specialist knowledge needed for each profession. The high level strategic training course being developed by the Design Council CABE will assist, but more in depth specific teaching for each professional area would also greatly assist, particularly material that helps to teach the teachers.

#### **Full Curricula**

**3.18** The ultimate aim of the project was for educational institutions to integrate teaching about inclusive design across their existing curricula, rather than running separate specialised modules or programmes. However, integrating new material into curricula would still amount to additional teaching demands. Where universities and colleges were already struggling to cover their existing curricula, adding new teaching requirements was a challenging prospect.

#### **Meeting demand**

- **3.19** Some universities did, however, respond to the project and asked for individual presentations about inclusive design from the BEPE project lead. Time constraints limited the number of visits to individual built environment schools, but presentations were given, for example to architecture students at Sheffield University and Westminster University, and to landscape architecture students at Gloucestershire University. Some universities regularly invite access experts (for example members of the National Register of Access Consultants) to give lectures on various inclusive design issues, which can be very inspiring.
- **3.20** One off presentations will not, however, give students the depth of knowledge and skills they need and the learning is not always assessed, but can inspire both students and educators to consider teaching the issue in more depth. Further consideration could be given in the future about how to capture and direct existing inclusive design expertise towards built environment courses and programmes in a coherent and constructive way for example as recognised inclusive design ambassadors in built environment professional education.

#### Other challenges in the built environment sector

**3.21** Inclusive design was only one of a number of topical issues at play in built environment education. Other issues, resulting from legislation or government pressures, such as sustainability (see the Think Up report Embedding Sustainability in the Undergraduate Civil Engineering Curriculum<sup>19</sup>), health and safety (see the RIBA / HSE report Healthy Design, Creative Safety - Approaches to health and safety teaching and learning in undergraduate schools of architecture<sup>20</sup>) and Building Information Modelling, made embedding inclusive design into education appear as a "nice to do" rather than an essential activity. The project had to demonstrate the value of inclusive design in order to balance the lack of a requirement for educators to think about it.

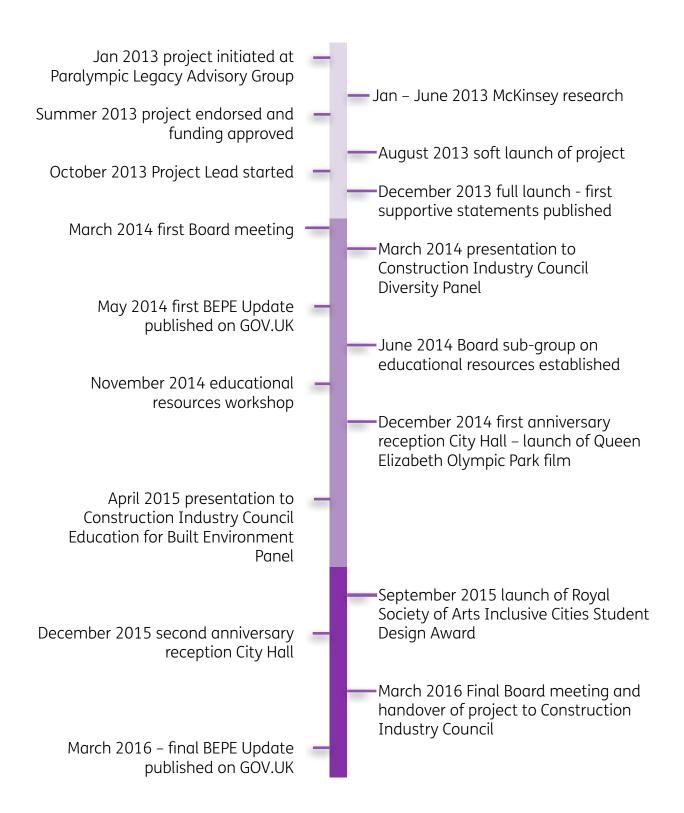
<sup>&</sup>lt;sup>19</sup> Embedding sustainability in undergraduate civil engineering

<sup>&</sup>lt;sup>20</sup> Healthy Design Creative Safety

#### Ability to connect with other initiatives

**3.22** The term inclusive design is often assumed to be relevant only to architects and designers, and not to all built environment professionals. Wider issues connected to disability discrimination are also often lost or ignored. Achieving an inclusive environment should be considered holistically and linked with other initiatives aimed at inclusivity, such as Disability Confident<sup>21</sup> the government's drive to narrow the large gap between the numbers of disabled people employed compared with non-disabled people. Disability Confident is helping employers to challenge attitudes towards disability, increase understanding of disability, remove barriers to employment, ensure that disabled people have the opportunities to fulfil their potential and realise their aspirations. An inclusive environment is an essential element in enabling disabled people to travel to work, work in a comfortable and safe environment that suits their needs, be better able to retain employment and so contribute fully to society.

### **4. What was achieved** Timeline of key project milestones



Summary of Progress (see paragraphs 4.1 – 4.24)

|   |                             | Initial educat                                    | Initial education/qualifications                           |   | Route to recognised<br>professional membership                  | d<br>ership                        | Continuing learning for<br>chartered professionals         | ng for<br>iionals                            |
|---|-----------------------------|---|--|---|---|------------------------------------|--|--|
| Professional<br>Area                          | Professional<br>Institution | Professional<br>Standards<br>Framework<br>amended | Course<br>accreditation/<br>validation process<br>reviewed | Support to build<br>teaching capacity<br>provided | Assessment of<br>Professional<br>Competence<br>Process reviewed | Guidance &<br>resources<br>updated | Profession<br>specific<br>Inclusive Design<br>CPD provided | Promotion /<br>profile raising<br>activities |
| Facilities<br>Management                      | BIFM                        |   |  |   |   |                                    |  |  |
| Architectural<br>Technologists                | CIAT                        |   |  |   |   |                                    |  |  |
| Planning (Town<br>and Country and<br>Spatial) | RTPI                        |   |  |   |   |                                    |  |  |
| Surveying /<br>Building /                     | RICS                        |   |  |   |   |                                    |  |  |
| Construction<br>Management                    | CIOB                        |   |  |   |   |                                    |  |  |
| Engineering                                   | ICE                         |   |  |   |   |                                    |  |  |
| Landscape<br>Architecture                     | П                           |   |  |   |   |                                    |  |  |
| Architecture                                  | RIBA*                       |   |  |   |   |                                    |  |  |
|   |                             |   |  |   |   |                                    |  |  |
| Progress begun                                |                             |   | Progress ongoing   | going   |   | Good progress being made           | s being made   |  |

\*RIBA and ARB jointly hold the criteria which prescribe architectural qualifications – the review of which is planned for later this year (see paragraph 4.21)

### **Progress by the Professional Institutions**

**4.1** The professional institutions were asked to map out how they might achieve the changes needed to meet the BEPE objective. Progress was always going to vary from institution to institution given the varied size and nature of the organisations working in such a diverse industry. Two institutions were able to make good progress in the first year, others progressed more slowly but achieved some significant changes in the second year, others set longer term plans.

#### **British Institute of Facilities Management (BIFM)**

**4.2** Recognising the crucial role of facilities managers in making buildings accessible and the powerful difference this can make to an individual and ultimately to business, the British Institute of Facilities Management (BIFM) were quick off the mark with changing their Professional Standards - their Professional Standards Framework was amended soon after the BEPE project began. A separate component was introduced into the overarching framework called 'Managing Accessibility and Inclusion' so that all FM professionals now have a standard to strive for and attain. The revisions were published with a foreword from the Mayor of London and the Minister for Disabled People.<sup>22</sup>

### Boris Johnson Mayor of London on the publication of the BIFM Professional Standards Handbook:

"Congratulations to BIFM for being the first organisation to change its professional standards to explicitly address the access needs of disabled people. This is a major step towards making access and inclusion a crucial part of decision-making for all facilities managers. This will make a real difference to disabled people's lives – both for work and leisure - a fitting legacy for our 2012 Games, when we hosted the most inclusive Olympic and Paralympic Games ever."

4.3 BIFM went on to introduce a specific unit called 'Understanding access management and inclusion' in their Level 3 qualification, and a unit called 'Managing accessibility and inclusion and its impact on facilities management' in its Level 4 qualifications, both accredited within the Qualifications Credit Framework. These units are currently optional but will become mandatory in 2017. BIFM is also planning to introduce inclusive design at Level 2. An online learning and assessment solution for Level 3 was launched in 2015. An online solution for Level 4 qualifications has been developed and will be available in 2016.

<sup>&</sup>lt;sup>22</sup> BIFM Professional Standards Handbook

#### Gareth Tancred, CEO of BIFM in 2014:

"The BEPE initiative is all about going beyond legislation, to really inclusive and accessible work and leisure environments, so that disabled and elderly people can fully participate in our society.

We believe that adhering to the basic levels of practice set out by the law is simply not enough. FM must go beyond compliance if we are to create truly inclusive environments."

**4.4** BIFM encourages all members to undertake CPD and has for a number of years provided a specific training course on inclusive design called Managing Accessibility,<sup>23</sup> supported by guidance called Inclusive Access Disability and the Equality Act<sup>24</sup>.

#### The Chartered Institute of Architectural Technologists (CIAT)

- **4.5** As the lead body for Architectural Technologists CIAT was keen to ensure that inclusive design formed an essential part of all CIAT's Accredited Honours and Masters Degree level programmes. Timing was in their favour as in 2014 CIAT<sup>25</sup> was proactively involved with the QAA review of the Subject Benchmark Statement for Architectural Technology. CIAT worked with the QAA to amend the benchmark statement to make more explicit reference to inclusive design. The revised SBS, published in October 2014, confirms that programmes in architectural technology are designed to meet the needs of industry, the profession and wider society and:
  - ensure students apply the principles of inclusive design to projects and processes
  - give an understanding of how disabled people, older people or families with small children perceive, experience and use all aspects of the built environment.

#### Professor Sam Allwinkle PPBIAT MCIAT, Chair of the CIAT Education Board:

"As designers, we aim for high standards of quality and exclusive buildings for our clients, however we must never lose sight of the users. We must always strive to achieve inclusive design to ensure that we enable all individuals and communities to access and use the spaces and places that we create. We absolutely support the BEPE project without reservation, and we will continue to challenge our profession, other professions, government and clients to achieve the aspirations and ambitions of creating an inclusive built environment."

<sup>&</sup>lt;sup>23</sup> Managing Accessibility Training Course

<sup>&</sup>lt;sup>24</sup> BIFM Good practice guide Inclusive Access Disability and The Equality Act

<sup>&</sup>lt;sup>25</sup> CIAT Support BEPE

**4.6** Once the final benchmark statement was published CIAT amended their Professional Standards Framework (prescribed for Chartered Membership)<sup>26</sup> to include the following mandatory threshold standard:

'an ability to successfully complete a sustainable and inclusive design project, systematic review or systematic case study, informed by current understandings in the discipline'

**4.7** Inclusive design knowledge and skills must now be addressed in accredited teaching programmes. This will help to ensure that newly qualified architectural technologists acquire greater inclusive design knowledge and skills as part of their professional qualifications. To encourage students CIAT required students to think about inclusivity in project submissions for their 2015 Student Awards for Excellence in Architectural Technology.

### Frances Robertson, Course Leader for B.Sc. Architectural Technology, Sheffield Hallam University:

Inclusive design is included progressively through undergraduate design studio project modules from first to final year. Awareness of the issues is raised in the first year with some incorporation into the design criteria; by final year it is a stipulation of the project brief.

#### The Royal Town Planning Institute (RTPI)

- **4.8** The RTPI reviewed their Assessment of Professional Competence (APC) criteria in 2015 and incorporated the need to understand and give consideration to inclusive planning in two key competencies:
  - C1 Professionalism and Code of Conduct
  - C2 the Spatial Planning Context
- **4.9** The revised guidance and criteria on the Assessment of Professional Competence (APC)<sup>27</sup> was published in March 2015 and the revisions were implemented in November 2015. The APC route is the main route to becoming a Chartered Town Planner for all graduates who have successfully completed an RTPI accredited degree (both spatial and specialist elements). Demonstration of the candidate's knowledge of inclusive planning is assessed through the APC route in order to elect Chartered Town Planners. Inclusive planning is currently being reviewed as a component of the assessment for the non accredited routes to Chartered membership.

<sup>&</sup>lt;sup>26</sup> CIAT Accreditation

<sup>&</sup>lt;sup>27</sup> RTPI APC Guidance

**4.10** The QAA Subject Benchmark Statement for Town and Country Planning is currently being revised and the RTPI have supported the following amendment:

"The need to demonstrate an understanding of the principles and processes that deliver an inclusive environment'  $^{\rm 28}$ 

The consultation draft includes this as a threshold standard - the minimum requirement that graduates of a bachelor's degree with honours reach. The draft SBS also encourages teaching strategies that include:

'Community based projects that help broaden the student's understanding of the social, attitudinal and physical barriers to inclusion'.

- **4.11** An article was included in The Planner in February 2015, and the criteria for the RTPI Awards for Planning Excellence were amended in 2015 to address inclusive planning. Projects submitted for the award must now demonstrate 'how the project considers the needs of all of the potential users of a development or locality that enables everyone to participate equally, confidently and independently in everyday activities and how the project addresses equality and diversity issues'.
- **4.12** The RTPI identified 8 CPD priorities for members in 2015 of which one is Health and Inclusive Planning, and a resource page created on the RTPI website. Inclusive planning will also form part of the RTPI Education Review 2016 -18 into RTPI learning outcomes for accredited planning degrees.

#### The Royal Institution of Chartered Surveyors (RICS)

- **4.13** The RICS is currently reviewing their professional standards. This provides the opportunity to embed inclusive design skills and knowledge into RICS education requirements and to align the standards with the revised QAA Subject Benchmark Statement for Land, Construction, Real Estate and Surveying which is currently being reviewed (see paragraph 4.17).
- **4.14** The RICS Assessment of Professional Competence (APC) is also currently being reviewed and the RICS Inclusive Environments Working Group has suggested the introduction of the following competencies for all RICS professionals, with the recommendation that Level 1 should become mandatory for all:

**Level 1:** Demonstrate knowledge and understanding of the context for inclusive environments, including the legislative, economic, ethical and moral cases.

**Level 2:** Provide evidence of the practical application of inclusive environment principles appropriate to your area of practice, and an awareness of the circumstances in which specialist advice should be sought.

<sup>&</sup>lt;sup>28</sup> QAA consultation on draft town and country planning SBS

**Level 3:** Provide evidence of reasoned advice given to clients and others on the policy, legal obligations and best practice implementation of inclusive environments in your area of practice.

**4.15** An article about BEPE was included in the Building Control Journal in 2014 and in the Building Surveyor Journal in 2015. A new online web class called Inclusive Design – Practical Introduction will be published shortly.

#### **Chartered Institute of Building (CIOB)**

- **4.16** The CIOB Education Framework is used by universities to develop and map their undergraduate and masters degree programmes. The framework is currently being reviewed by CIOB to ensure there is explicit reference to accessible and inclusive design and build. CIOB also plans to develop specific guidance for universities and colleges in embedding inclusive design into all their accredited built environment courses.
- **4.17** CIOB has been working with the QAA on the review of the SBS for Land, Construction, Real Estate and Surveying. Consideration is being given to embedding 'the principles of inclusive design and the processes needed to design, build and manage accessible and inclusive buildings places and spaces' throughout the benchmark statement. The benchmark statement is also likely to recognise that a common requirement within all programmes is the development of an awareness of legal and ethical responsibilities that enable the diverse needs, sentiments and requirements of all stakeholders to be recognised and valued. Including as a threshold standard the need to demonstrate a basic understanding and awareness of inclusive design, and recognising diverse user needs by putting people (of all ages and abilities) at the heart of the construction process, will significantly assist the aims of the BEPE project.
- **4.18** The Professional Standards Committee is also working to embed Inclusive Design within CIOB Professional Standards and in the guidelines for candidates and Professional Review Assessors. Specific guidance for Design Managers applying for the Professional Review is currently being considered, to include competency requirements for inclusive design.

#### The Institution of Civil Engineers (ICE)

**4.19** ICE is currently completing a wide-ranging review of engineering knowledge to identify strengths and weaknesses. Inclusive design has been identified as a theme that crosses a number of disciplines and ICE is developing plans and content for a programme of work in this area. A curated knowledge document has been drafted on inclusive design and ICE is supporting the review of the Joint Board of Moderators' Design Guidelines to incorporate inclusive design skills and knowledge.

**4.20** ICE is seeking to create a CPD model which provides site tours of local environments for engineers. A campaign is also being created, building on ICE diversity work.<sup>29</sup>

#### Nathan Baker Director Engineering Knowledge ICE

"Civil Engineers should be equipped with the inclusive design skills, knowledge and awareness to shape the future for the benefit of all"

#### Royal Institute of British Architects (RIBA)/Architects Registration Board (ARB)

- **4.21** The Architects Registration Board has responsibility for prescribing the qualifications and practical training experience required for entry onto the UK Register of Architects. The knowledge, understanding and skills needed for a student to progress through their architecture qualifications are set out in the document 'The Prescription of qualifications: ARB Criteria at Parts 1, 2 and 3'. These criteria, which are included within the QAA's Subject Benchmark Statement for Architecture, together with the professional criteria at Part 3, are also used by the Royal Institute of British Architects (RIBA) and the Royal Incorporation of Architects in Scotland for the purposes of admission to membership to those bodies.
- **4.22** The ARB is planning to commence a review of the UK routes to registration later this year. A review of the Criteria at Parts 1, 2 and 3 will form a key part of the ARB's work in this area. Given that the Criteria are held in common with the RIBA and form part of the QAA's Subject Benchmark Statement for Architecture, all three parties are likely to be involved in the review.
- **4.23** The ARB Prescription Committee has already considered how it can support the BEPE project and the Committee has agreed to consider adding inclusive design to the threshold standards for entry on to the Register when the Criteria at Parts 1, 2 and 3 are reviewed. Once the criteria have been reviewed RIBA will review the validation procedures (unlikely to before 2018).

#### Jane Duncan, President Royal Institute of British Architects

"It is only through an awareness of the need for Inclusivity in the built environment professions and focussed training that we can start to improve our attitudes, culture and working practices. This is not a nice to have but vital for the future of our professions and the clients that we serve".

<sup>&</sup>lt;sup>29</sup> see Engineering Change https://www.youtube.com/watch?v=E-bllZe0dLY

**4.24** RIBA have been delivering CPD training for architects on inclusive design for a number of years – it is one of the ten mandatory yearly CPD core curriculum topics.<sup>30</sup> Members must gain a minimum of two hours CPD each year - the list of possible topics (to be reviewed later this year) provides great scope for choice. In 2016 the core CPD topic is 'Inclusive access to existing buildings: how to achieve real change' and is being delivered in 14 cities.

#### RIBA CPD Core Curriculum Study Guide Possible topics: Access for all: universal/inclusive design

- the principles of universal or accessible design
- planning and access
- equality and diversity legislation, including The Equality Act 2010, and relevant building and other regulations
- access and inclusion in the workplace
- understanding, writing and implementing access statements
- relevant product specification
- community consultation and engagement and working with user groups
- special issues for fire, security and egress
- principal guidance standards
- different buildings and their uses and users
- design detailing, such as colour and contrast, acoustics
- fixtures, fittings and equipment
- refurbishment of listed buildings and access
- management policies, procurement and brief writing
- lifetime homes and wheelchair housing

### 5. Next steps

#### Passing the baton from government to industry

#### **The Construction Industry Council**

- **5.1** The Construction Industry Council has agreed to assume responsibility for the BEPE project in 2016/17. This will ensure a smooth transition from a government driven project to an industry owned and led project, it will help to maintain the momentum established in the first two years and take the project forward into its next phase of development.
- **5.2** The Construction Industry Council (CIC) is the representative forum for the professional bodies, research organisations and specialist business associations in the construction industry. It occupies a key role within the UK construction industry providing a single voice for professionals in all sectors of the built environment through its collective membership of 500,000 individual professionals and more than 25,000 firms of construction consultants.
- **5.3** As a membership organisation the CIC has the scope to broaden the engagement of industry partners in the BEPE project's objectives. It has the capacity to raise the profile of the need to achieve an inclusive environment within the CIC's current diversity, education and training projects and work streams as well as broadening the approach to the issue in its widest sense.
- **5.4** The CIC will facilitate quarterly meetings of the BEPE Project Board, and will report progress to the Minister for Disabled People twice a year and to the Paralympic Legacy Advisory Group as requested. Stakeholders will be updated with progress via information on the CIC web site.
- **5.5** The CIC will take the project forward by:
  - supporting the professional institutions to implement their inclusive design education and training commitments
  - assisting the higher education (HE) sector to improve the student and educator approach to inclusive design education
  - providing in kind support to the Royal Society of Arts to run the Inclusive Cities Student Design Award in 2016/17
  - encouraging the professional institutions, the HE sector and others as appropriate, to develop additional educational resources to assist educators in teaching inclusive design effectively to undergraduates, postgraduates and qualified practitioners

- encouraging members to join up BEPE project initiatives with initiatives being undertaken to implement the Department for Communities and Local Government's Inclusive Environments Action Plan
- promoting the Disability Confident campaign amongst its members and with employers in the construction industry to become disability confident
- putting in place arrangements to enable the BEPE project to be sustained in future years.

### Guidance on achieving an inclusive environment for built environment professionals

- **5.6** Once accreditation criteria and professional standards have been amended to incorporate inclusive design, the professional institutions could be encouraged, as part of their future road map commitments, to endorse and support specific guidance for their members on achieving an inclusive environment. Using as a model, the Guidance on Sustainability<sup>31</sup> developed by the Engineering Council for professionally registered engineers, consideration could be given to developing a similar short concise guidance document for all built environment professionals to assist them to carry out their work in a way that achieves an inclusive environment.
- **5.7** The following six principles are suggested as a way to support, guide and motive built environment professionals when making decisions for clients, employers and society which affect the accessibility and inclusivity of buildings, places and spaces:
  - 1. Contribute to building an inclusive society now and in the future
  - 2. Apply professional and responsible judgement and take a leadership role
  - 3. Apply and integrate the principles of inclusive design from the outset of a project
  - 4. Do more than just comply with legislation and codes
  - 5. Seek multiple views to solve accessibility and inclusivity challenges
  - 6. Acquire the skills, knowledge, understanding and confidence to make inclusion the norm not the exception.
- **5.8** Another option for future consideration is the production of a Briefing Guide and a Guide for Teaching and Learning on Inclusive Environments. The Higher Education Academy has in the past, through their centres of excellence in teaching and learning in the built environment (CEBE), produced a number of teaching and learning focused publications and resources for example 'The guide for teaching and learning in archaeology, Number 5, Inclusive, accessible archaeology' published in 2007<sup>32</sup>.

<sup>&</sup>lt;sup>31</sup> Engineering Council Guidance on Sustainability

 $<sup>^{\</sup>scriptscriptstyle 32}\,$  HEA Teaching and learning guide No 5 Inclusive accessible archaeology

Drawing on the work of the BEPE project, the Design Council CABE Inclusive Environments Hub and training initiative, and the Breaking down Barriers project at the University of Reading, the production of a similar guide on inclusive environments would greatly assist those in the HE sector wishing to expand the capacity to teach built environment students inclusive design skills and knowledge.

### **The BEPE Project Vision**

Every newly qualified built environment professional will have the

Attitude Skills Knowledge

to deliver accessible and inclusive buildings, places and spaces.

**Students:** Learn the skills that make inclusive design second nature

**Educators:** Inspire your students to acquire the knowledge, skills and confidence to make inclusion the norm not the exception

**Professionals:** Integrate the principles of inclusive design into all your projects

### 6. Conclusion

#### Paul Morrell BEPE Board chair

"In the end dignity and humanity is what this is about, in all of its various shapes and sizes. This is not about design with a few things added; and still less about design with a few compromises: it is just about good design – so let's call it that and know what we mean."

- 6.1 Making inclusive design an important part of education and training for all built environment professionals was never going to be a quick or easy task. But progress has been made in getting the many institutions whose province is the built environment to commit to a programme of embedding the principles of accessible and inclusive design into their educational requirements.
- **6.2** As the project moves forward into its next phase, there is scope to join up BEPE project initiatives with the activities being undertaken by the construction industry to meet the challenge set by the Minister for Communities and Local Government in the Inclusive Environments Action Plan.<sup>33</sup>
- **6.3** There is also scope to link both these built environment projects with the Disability Confident campaign and to work with employers in the construction industry to become disability confident. A combination of more confidence in employing disabled people and a more accessible and inclusive environment will help towards the aim of reducing the disability employment gap.
- 6.4 The last two years has demonstrated that there is an appetite for ensuring that our built environment is designed, built and managed in a way that makes buildings, places and spaces accessible, legible and welcoming to the greatest possible number of people.
- 6.5 The next challenge is for clients, developers and the owners of buildings to embrace inclusive design principles and processes in their initial vision, in their project briefs and procurement processes and to champion the issue at the highest level throughout the construction industry. This is the key to achieving an inclusive environment.

### **Annexe One** BEPE Project Board Members

| Paul Morrell OBE     | UK Government Chief Construction Adviser 2009 - 2012  |
|----------------------|---|
| Louise Brooke-Smith  | President Royal Institution of Chartered Surveyors 2014 - 2015  |
| Peter Caplehorn      | Policy Director and Deputy Chief Executive,<br>Construction Products Association  |
| Barry Clarke         | President Institution of Civil Engineers 2013,<br>Professor of Civil Engineering Geotechnics, University of Leeds                           |
| Geoff Cook           | Chair of the Chartered Institute of Building Accreditation Panel,<br>Associate Professor, University of Reading                             |
| Gordon Dabinett      | Chair Council of Heads of Planning Schools,<br>Professor of Regional Studies, University of Sheffield                                       |
| Michael Edwards      | Partner Eden McCallum (previously McKinsey & Co)  |
| Margaret Hickish MBE | Member Paralympic Legacy Advisory Group,<br>Access and Inclusion Manager Network Rail,<br>Paralympic Adviser Greater London Authority 2011  |
| Steven Orr           | Council Member Institution of Civil Engineers   |
| David Petherick      | Chair B/559 Committee British Standards Institution   |
| Ann Skippers         | President Royal Town Planning Institute 2010, Visiting<br>Professor Bartlett School of Planning University College London                   |
| Gareth Tancred       | Chief Executive Officer (until June 2015)<br>British Institute of Facilities Management   |
| James Sutton         | Chief Executive Officer, (July 2015 onwards)<br>British Institute of Facilities Management  |
| Alexander Wright     | Chair Standing Conference of Heads of Schools of Architecture,<br>Professor of Architecture and Head of Architecture,<br>University of Bath |

### Annexe Two Supportive Statements

#### **Royal Institute of British Architects (RIBA)**

"The Royal Institute of British Architects (RIBA) feels passionately that improving accessibility for disabled people forms a critical curricular element for all those involved in studying the built environment; we are proud therefore to support this wider industry drive. We will be working to develop criteria referencing inclusive design as part of our work with all recognised RIBA schools of architecture around the world to help lead this critical aspect of the design process. Building on the all-inclusive design ethos of the London 2012 Olympic and Paralympic Games, we will actively promote the design and management of future spaces with accessibility and good design at their core to the next generation of architects, engineers, and planners."

#### Institution of Civil Engineers (ICE)

"The Institution of Civil Engineers is pleased to support this initiative. London 2012 demonstrated that built environment professionals can work together to provide facilities that are inclusive for a wide variety of needs across the whole population. The challenge now is to embed this in the education and training of all professionals. ICE will be working with sister organisations, members and stakeholders to make this a reality."

#### **British Institute of Facilities Management (BIFM)**

"We are delighted to support this great initiative. This follows the fantastic success of the 2012 Olympic and Paralympic Games which were considered to be the most accessible games ever held. The BIFM look forward to working with partner institutes to ensure that the access needs of elderly and disabled people are met to achieve inclusive access for all. BIFM have been supporting members understand the importance of inclusive access for many years. This support is crucial as facilities managers are at the forefront of making their buildings accessible to all; their role helps improve the lives of individuals with disabilities through improved access and workplace conditions."

#### **Royal Institution of Chartered Surveyors (RICS)**

"RICS is delighted to lend its support to the Built Environment Professional Education Project, and to serve on the BEPE Advisory Board. As the leading professional body in land, property and construction, we welcome all efforts to equip built environment professionals with the knowledge and expertise to ensure inclusive design."

#### Royal Town Planning Institute (RTPI)

"The RTPI is very keen to see inclusive design embedded in the built environment professions and looks forward to working with partners to ensure we have a lasting Paralympic Legacy."

#### Chartered Institute of Building (CIOB)

"The London Olympics and Paralympics set a new benchmark for better access to the built environment for disabled people. The challenge now is to take the lessons learned and improve training and education so that this does not remain a shining beacon of success but becomes the norm. The Chartered Institute of Building is delighted to support this initiative."

#### **Chartered Institution of Highways & Transportation (CIHT)**

"Chartered Institution of Highways & Transportation is happy to support the Built Environment Professional Education Project. We look forward to working with you and other partner organisations to take this initiative forward."

#### The Chartered Institution of Building Services Engineers (CIBSE)

"Inclusive design is at the heart of CIBSE's mission to engineer a sustainable built environment and we welcome this opportunity to work with partner institutions to achieve the BEPE vision"

#### Landscape Institute

"The Disability Discrimination Act has had a profound influence on design for accessibility. We welcome initiatives that will ensure a wider range of professions develop the knowledge and expertise required to ensure better designed places for everyone."

#### The Chartered Institute of Architectural Technologists (CIAT)

"The Chartered Institute of Architectural Technologists (CIAT) recognises that inclusive design is at the heart of a successful built environment and as the lead body for Architectural Technology ensures that it forms an essential part of all CIAT's Accredited Honours degree level programmes.

CIAT is delighted to be involved with an initiative that holistically approaches the relationship that society has with the built environment to recognise differing needs, wants and functions through the education of our future architectural and building professionals."

#### **British Institute of Interior Design (BIID)**

"The British Institute of Interior Design welcomes the BEPE Project to ensure that the legacy of the 2012 Paralympics is a collaborative effort by all who design and work in the built environment, to create places and spaces that are truly accessible and inclusive for disabled people."

#### Local Authority Building Control (LABC)

"As the representative body for the building control teams working in local authorities, LABC fully supports this project to improve the education and training of built environment professionals in inclusive design. Building control surveyors have an important role to play to ensure high quality new buildings, and it is vital that they are appropriately trained."

#### **Construction Industry Council (CIC)**

The Construction Industry Council welcomes and supports the BEPE project and it will endeavour to work with its members to improve understanding of the positive impact that creating more inclusive environmental support has, for everyone in society, irrespective of age and physical capabilities. It is important that our industry makes ease of access to our buildings, streets and public spaces the norm and integral to all design and construction.

#### The Council of Heads of the Built Environment (CHOBE)

CHOBE is pleased to support the work of the Paralympic legacy team in their endeavours to heighten awareness of the needs of disabled people among Built Environment professionals. As the body representing the Built Environment Education community, CHOBE recognises that too often the needs of disabled people are not well understood or sufficiently integrated within the curricula of the student body. As awareness grows of both the needs of disabled people and their contribution to society in so many ways when accessible and inclusive provision is made, it is our view that all built environment professionals, from designers to managers, should seek to both recognise and accommodate disability needs within the properties for which they have responsibility throughout the building life cycle. Through its members, CHOBE will seek to encourage its colleagues to embed consideration of disability and inclusive design processes in meaningful ways in the curricula.

#### The Standing Conference of Heads of Schools of Architecture (SCHOSA)

"The principles of inclusive design are integral to the delivery of buildings and cities that are responsive to the needs and aspirations of everyone. The Standing Conference of Heads of Schools of Architecture (SCHOSA) is pleased to support this initiative through the education and training of architects and other professionals in the built environment."

#### **University of Salford**

"Infusing Inclusive Design into the education process of our future Built Environment professionals will be a fitting legacy from the Paralympic Games. The School of the Built Environment at the University of Salford is committed to supporting this initiative and looks forward to an ever increasing inclusiveness of the places and spaces we live in."

#### **University of Reading**

"The legacy of the London Games, which carried inclusive design to a new level, must be part of main stream construction thinking - integrating inclusive design into all of professional construction education is an excellent way to make this happen."

### Annexe Three Glossary of Acronyms

#### Professional Institutions

- **ARB** Architects Registration Board
- **BIFM** British Institute of Facilities Management
- BIID British Institute of Interior Design
- CHIT Chartered Institution of Highways and Transportation
- **CIAT** Chartered Institute of Architectural Technologists
- **CIBSE** Chartered Institution of Building Services Engineers
- CIOB Chartered Institute of Building
- EC Engineering Council
- ICE Institution of Civil Engineers
- LI Landscape Institute
- **RIBA** Royal Institute of British Architects
- **RICS** Royal Institution of Chartered Surveyors
- **RTPI** Royal Town Planning Institute

#### **Educator Forums**

- ACED Association of Civil Engineering Departments
- SCHOSA Standing Conference of Heads of Schools of Architecture
- CHOBE Council of Heads of Built Environment
- CHOPS Conference of Heads of Planning Schools
- AAE Association of Architectural Educators

#### **Government Departments**

- DCLG Department for Communities and Local Government
- BIS Department for Business Innovation and Skills
- **DCMS** Department for Culture Media and Sport
- **DWP** Department for Work and Pensions
- **ODI** Office for Disability Issues

#### **Other Organisations**

- CAE Centre for Accessible Environments
- **CIC** Construction Industry Council
- GLA Greater London Authority
- LABC Local Authority Building Control
- **QAA** Quality Assurance Agency
- RCA Royal College of Arts
- **RSA** Royal Society of Arts

#### Other

- ABX Architecture Boston Expo
- APC Assessment of Professional Competence
- CPD Continuing Professional Development
- E4BE Education for Built Environment
- **iBEE** Innovation in Built Environment Education
- SBS Subject Benchmark Statement

### Annexe Four What is Inclusive Design?

When buildings, places and spaces are inclusively designed, built and managed it helps all of us to live, work and play independently, be involved in our community and to reach our full potential.

We all benefit from good accessibility, including those of us who do not consider ourselves to be disabled. Inclusive design is good design, whether we are young or old, are with children, pushing a children's buggy, or carrying luggage. We should all understand inclusive design principles and processes and have the knowledge, skills and attitude to address these in our professional lives.

Inclusive design recognises that we are all different and plans for this diversity. Inclusive design helps create solutions that provide choice as to how we access and use buildings or spaces, and enables all of us to use buildings and places safely, easily and with dignity, regardless of disability, age or gender.

Inclusively designed developments are welcoming, flexible and convenient, providing choice to enable us to access and use a building in the way that suits our own particular needs. Where a single design solution cannot accommodate all of us, a variety of different solutions can help to avoid unnecessary segregation, separation or effort.

Inclusive design helps to ensure buildings and spaces are future proofed, enables independent access, and should work with minimal management intervention.

Despite huge improvements in the accessibility of our built environment in the last 25 years, and a much greater awareness of the needs of disabled and older people, we still tend to be constrained in our approach to achieving an inclusive environment. By only meeting minimum regulatory standards, we often fail to consider what further provisions, features or designs are appropriate to ensure we all can use the building or space comfortably, easily and safely. Schemes should from the outset aim to meet the highest standards of access and inclusion.

<sup>&</sup>lt;sup>34</sup> Fulfilling Potential Strategy

<sup>&</sup>lt;sup>35</sup> WHO Age Friendly Cities

<sup>&</sup>lt;sup>36</sup> UN Convention on the Rights of Disabled People

#### **Government Planning Policy and Planning Practice Guidance**

The Government's National Planning Policy Framework states in paragraph 57 that:

'It is important to plan positively for the achievement of high quality and inclusive design for all development, including individual buildings, public and private spaces and wider area development schemes.'

The government's Planning Practice Guidance defines an inclusive environment as:

'One that can be accessed and used by everyone. It recognises and accommodates differences in the way people use the built environment.'

It goes on to say that good design can help to create buildings and places that are for everyone. Inclusive design acknowledges diversity and difference and is more likely to be achieved when it is considered at every stage of the development process, from inception to completion. However it is often mistakenly seen as a Building Regulations issue, to be addressed once planning permission has been granted, not at the planning application stage.

The most effective way to overcome conflicting policies and to maximise accessibility for everyone is for all parties to consider inclusive design from the outset of the process. This is particularly important when considering historic buildings and conservation, and highways. Thinking at the design stage about how the completed building will be occupied and managed can overcome many barriers experienced by some users. Too often the needs of users, including disabled people, older people and families with small children, are considered too late in the day.

Inclusive design should not only be specific to the building, but also include the setting of the building in the wider built environment, for example, the location of the building on the plot; the gradient of the plot; the relationship of adjoining buildings; and the transport infrastructure.

Issues to consider include:

- proximity and links to public transport;
- parking spaces and setting down points in proximity to entrances;
- the positioning and visual contrast of street furniture and the design of approach routes to meet the needs of wheelchair users and people with visual impairments; and
- whether entrances to buildings are clearly identified, can be reached by a level or gently sloping approach and are well lit.

<sup>&</sup>lt;sup>37</sup> National Planning Policy Framework

<sup>&</sup>lt;sup>38</sup> Planning Practice Guidance

#### **CABE's Principles of Inclusive Design**

The Commission for Architecture and the Built Environment (CABE) published the Principles of Inclusive Design They Include You in 2006. These principles, based on years of practical experience, were developed following the introduction of the Disability Discrimination Act in 1995 (now incorporated into the Equality Act 2010) and have been used by designers, planning authorities, access consultants, local access groups and others to articulate the need for an accessible and inclusive environment.

Now at the Design Council, CABE launched a new Inclusive Design Hub<sup>39</sup> in July 2014 which provides the following statement on inclusion and inclusive design:

'An inclusive society is one that leaves no one behind. Inclusive environments are places that work better for everybody - whether that place is a school, office, park, street, care home, bus route or train station. An inclusive approach to planning, design and management is an opportunity to use creativity and lateral thinking to make places that reflect the diversity of people who want to use them.

Crucial to this is consultation with user groups, putting people who represent a diversity of age, ability, gender and community at the heart of the design process.

Inclusive design is the responsibility of everyone who works in the built environment: planners, those who commission new buildings and places, access consultants, designers, architects, engineers, surveyors, property owners and facilities managers.'



Please contact us if you require this report in alternative formats.

Web: https://www.gov.uk/government/publications/built-environment-professionaleducation-project-updates

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